

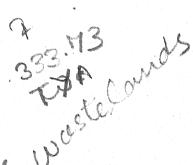
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# MINISTRY OF RURAL AREAS AND EMPLOYMENT GOVERNMENT OF INDIA



Conducted by:

DR. R.C. TYAGI



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#### PREFACE

Watershed Management is a multi-pronged approach for the overall development of rainfed areas. It comprises of not only soil and water conservation but also suggests various alternative means for income generation. Through these, it aims at self-sufficiency of rural areas. In order to realize this goal, a synergistic approach is essential. Adoption of sustainable methods for the conservation of soil and water, mobilization of people for participating in planning and implementation of the watershed projects, capacity building and community organization, coordination between different developmental agencies, viz. Central and State Governments, Non-Governmental Organizations, other private agencies, etc. and a viable extension wing, all these aspects form the anchor of any watershed project. Essence of unified participatory approach would definitely transform the grey areas into green, which is the index of a successful watershed programme.

The Ministry of Rural Areas and Employment, Department of Watershed Development sponsored this evaluation study to be conducted by the author at the Giri Institute of Development Studies, Lucknow. I do have an opportunity to express my gratitude to Mr. Halim Khan, Secretary, Department of Integrated Wasteland Development and Water Resources, Lucknow for providing us the opportunity to conduct this evaluation. I am also thankful to Mr. R.S. Pande, Addl. Director, Department of Integrated Wasteland Development, Lucknow, for extending necessary support during the study. Mr. Pande has been very helpful to me as he spared his valuable time to discuss the various issues related with the study despite his busy work schedule, as and when I approached to him. I am obliged to the officials of the Department of Soil Conservation, Etawah, particularly to Mr. Pankaj Tripathi, Dy. Director, Extension, Etawah, for extending necessary cooperation during the field survey and study period.

I express my profound obligation and gratitude to Prof. G.P. Mishra, Director, Giri Institute of Development Studies, Lucknow, who not only encouraged me to work on this evaluation study but also spared his valuable time to guide me despite his busy schedule. Prof. Mishra has always been a source of academic inspiration to me and in completion of this evaluation study, his contribution has been too vital to be expressed in just few words.

I am also thankful to Mr. Manoharan, K. for word processing the manuscript carefully and efficiently. My thanks are due to Mr. R.S. Bisht for maintaining official records and to Mr. Deepak Sharma for providing his valuable time for footnoting of the photoplates.

DR. R.C. TYAGI

Giri Institute of Development Studies Lucknow

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# AN EVALUATION OF INTEGRATED WASTELAND DEVELOPMENT PROJECT – DISTRICT AURAIYA

#### **Introduction**

The watershed approach provides the ideal means for integrated wasteland development programme. It involves the exploration and development of the complex inter-relationship between the watershed resources and population of the region and has opened up new perspective in agricultural development and helped in improving and stabilizing crop production. Watershed is a physical, economic and social system, which has a wide-ranging effect on the lives of the people. Every piece of land is a part of some watershed and people and land are the focal points for all the watershed activities. People and nature are both part of a whole. The degradation of environment is basically attributed to the increasing biotic pressure on the fragile eco-systems in the absence of adequate investment and appropriate management practices to augment and conserve the natural resources.

The sustained productivity of food, fuel, fodder, fibre, fruit and timber can be ensured by judicious and effective management of soil, water and vegetation. Now-adays watershed management is coming up as an integrated approach for overall development of an area, in terms of socio-political and economic development. Different developmental agencies, viz. Governmental, non-governmental and private are involved in the planning, execution, monitoring and evaluation of watershed activities in a vast acreage of land. In the light of these statements, Department of Land Resources, Ministry of Rural Development, Government of India has sanctioned the proposal of District Rural

Development Agency (DRDA), Auraiya in the year1996. The proposal was approved for the implementation of Integrated Wasteland Development Project for Watershed Development Programme in Auraiya District of Uttar Pradesh at a total cost of Rs.4,06,00,000/- (Rupees Four crores and six lakhs only) for the treatment of a total area of 10150 hectares.

Out of this total amount (Rs.406.00 lakhs), Rs.182.06 lakhs has been allotted to the Chairman of DRDA, Auraiya, in three instalments. The first instalment of Rs.60,90,000/- was cleared on 16th December 1996, second instalment of Rs.40,60,000/- on 15th May 2000 and third instalment of Rs.80,56,000/- was cleared on 18th December 2000. 15 per cent of the total project cost had been released as first instalment of 1996-97 to the Chairman, District Rural Development Agency, Auraiya District, Uttar Pradesh @ 3th for administrative costs, 3th for training, 4th for community organization and 5th for work component. Due to certain reasons and procedural delay, second instalment of Rupees Forty lakhs and sixty thousand has been released on 15th May 2000 and the third instalment of Rupees Eighty lakhs and fifty six thousand were released on 18th December 2000 to the DRDA of Auraiya District along with certain norms and directives laid by Ministry of Rural Development, Government of India. In December 2001, Giri Institute of Development Studies, Lucknow has been selected by the Department of Land Development and Water Resources, Ministry of Rural Development, Government of Uttar Pradesh, for making an evaluation of executed work in District Auraiya.

### Methodology

This evaluation report of the Integrated Wasteland Development Project for District Auraiya has been prepared mainly on the basis of intensive field survey. A deep enquiry

has been made regarding the Watershed Development Team, Watershed Development Association, Community Organization, Users Group, Self-Help Groups, Women Groups and their participation in the execution of project work. Some Watersheds and Villages have been checked thoroughly, which were selected randomly. Some of the Peripheral Bund (PB), Marginal Bund (MB), Contour Bund (CB) and Check Dam (CD) were checked carefully at the concerning watersheds and villages, which were executed by the Project Implementing Agency (PIA).

The vital photographs of the PB, MB, CB, CD, Dams, Ponds, Kutcha and Kharanja Road and other completed work under the Community Development Work, were taken and placed in this report. The evaluator personally met with the President, Treasurer and other members of the Self-Help Groups at the site and enquired about the progress of the Groups and checked their accounts, passbooks and proceeding registers. All the relevant informations regarding the execution of Watershed Development work has been collected from Bhoomi Sanrakshan Unit and Adhikaris (BSA) of the District Auraiya. Other official information regarding expenditure accounts were gathered from Deputy Director's Office, Etawah, as District Auraiya comes under the control of Dy. Director, Extension, Etawah.

#### Project Profile

Wasteland means degraded land, which is producing below its full productive capacity and which can be improved through a reasonable investment (Ministry of Rural Development, Government of India, 1994). The land, which is deteriorating for lack of appropriate water and soil management or on account of natural, causes. In District Auraiya, the wastelands have been selected on the basis of watersheds, survey team held detailed discussions with the Watershed Committee, Watershed Associations to identify

the need of each village/watershed with regard to fodder, fuel, timber as well as measures required to be taken to conserve soil and moisture and natural resources.

To develop the wasteland on watershed basis, an integrated wasteland development project for district Auraiya had been prepared, which was approved and sanctioned for the financial assistance by the Department of Land Resources, Ministry of Rural Development, Government of India. The wasteland of District Auraiya, which have been taken and improving by application of scientific, technological and other sources so as to provide economically and ecologically viable vegetative cover on watershed basis. Therefore, watershed has been taken as the basic unit for planning, conservation of soil and water, regeneration of vegetal cover.

Major portion of the district comes under the catchment of Yamuna river and its tributaries. Slope of area varies from 0.5 to 8 per cent. The major areas are affected by soil erosion problem. The area is well drained in upper reaches, but in lower reaches shallow deep ravines have been formed. Texture of the soil varies from loamy sand to sandy loam. Depth of the soil varies from 0.5 metre to more than 50 metres, permeability of the soil varies from moderate to very high. The soils are very poor in organic matter, i.e., nitrogen and phosphorus but rich in potash.

Depth of ground water level varies from 12 metres to 15 metres in different seasons. Recharge of dugout well is poor. Average annually rainfall received 790mm. Out of this 60 per cent of rain water flows as run-off towards rivers carrying with fertile soil due to slope terrain on an average of 20 metric tonne per year fertile soil is lost. This has resulted in continuous decrease in the productivity. Due to continuous pumping out ground water, aquifer levels are falling at an average rate of 0.30 metre per year.

Due to mis-management of natural resources, like soil, water and vegetation, top soil has been washed away and formation of shallow ravines are under process. In some places parent rocks has been exposed. At present depth of soil is less than 0.5 metre, slope percentage ranges from 0.5 metre to 8 metre. About 60 per cent area of the district suffers from land degradation. The rolling and undulating topography with higher slopes have resulted in severe erosion and siltation in reservoirs. Due to land degradation, ecology of area has been disturbed. The major problems of the district are (a) receding ground level, (b) increased moisture stress, (c) soil erosion and formation of shallow and deep gullies and (d) lack of vegetable cover.

The ultimate aims and objectives of this Integrated Wastelands Development Project is to develop the neutral resource base, to sustain its productivity, improve the standard of living of poor farmers and landless labourers and efforts for restoration of ecological balance and to meet the fuel and fodder demand of the area. Finally, the goals to be achieved under this project are: (a) to recharge the aquifer, (b) to conserve and utilization of natural resources, (c) reduce the adverse effect of drought, flood by reducing run off losses and recharged the underground water, and (d) to increase the availability of fuel and fodder.

#### **Watershed Proposal**

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Watershed proposal had been prepared on the basis of guidelines provided from Wasteland Development Board, Ministry of Rural Development, Government of India.

According to the Watershed proposal the following conservation and management practices have to be done:

- (1) In-situ moisture conservation practices contour cultivation.
- (2) Contour vegetative barriers, construction of field bunds, establishment of thick vegetative barriers with shrubs, grass and sowing of legume seeds on contour lines.
- (3) Contour bunds with sodding.
- (4) Peripheral bunds with sodding.
- (5) Submergence bundhies with sodding.
- (6) Land levelling and smoothening.
- (7) Construction of diversion drain and plantation of bushes and trees on the bank of diversion drain.
- (8) Gully plugs with sodding.
- (9) Pucca structure for safe disposal of excess run off water from contour bunds, submergence bunds, gully plugs, water harvesting bundhies and peripheral bunds.
- (10) Check dam construction stone check dam, pucca check dam.
- (11) Agro-forestry-seeds of suitable species would be sown on the earthen bunds/sapping also be planted.
- (12) Dry land horticulture.
- (13) Farm forestry.
- (14) Afforestation on community land and government land.
- (15) Three-tier vegetation along the banks of Gullies and Nalas.

The total number of watersheds selected under the Integrated Wasteland Development Project are 20. The area of Watershed is ranging from 400 Ha. To 600 Ha. Watershed-wise soil classification, location and area to be treated is given in Table-1.

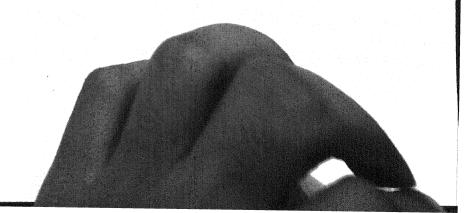


Table 1: Watershed-wise Soil Classification, Location and Area to be Treated in District Auraiya

	Maruhanas	Textural Classification		Total Area to
Name of Watershed	Number of Watershed	Loamy Sand*	Sandy Loam**	be Treated
		(in ha.)	(in ha.)	(in ha.)
Yamuna 2D4C1	1	870	580	400
Yamuna 2D4C1	2	900	600	400
Yamuna 2D4C1	3	925	675	400
Yamuna 2D4C1	4	900	600	400
Yamuna 2D4C1	5	840	560	400
Yamuna 2D4C1	6	850	550	425
Yamuna 2D4C1	7	2400	1600	600
Yamuna 2D4C1	8	2460	1640	600
Yamuna 2D4C1	9	2425	1625	600
Yamuna 2D4C1	10	2400	1550	600
Yamuna 2D4C1	11	1080	720	500
Yamuna 2D4C1	12	1320	880	575
Yamuna 2D4C1	13	1560	1040	600
Yamuna 2D4C1	14	1440	960	575
Yamuna 2D4C1	15	900	600	500
Yamuna 2D4C1	16	1200	800	550
Yamuna 2D4C1	17	780	520	500
Yamuna 2D4C1	18	840	560	500
Yamuna 2D4C1	19	840	560	500
Yamuna 2D4C1	20	900	600	525
Total	20	25830	17220	10150

<sup>\*</sup> Loamy sand 60% watershed area.

Source: Compiled from the Data Provided by Dy. Director's Office, Soil Conservation, Department, Auraiya, (Etawah)

## **Watershed Development Team**

Under the Integrated Wasteland Development Project, Watershed Development Team (WDT) has been constituted in the District Auraiya. The members of Watershed Development Team are well educated and technically trained in watershed management work. There are 16 members in this team altogether. PIA (Project Implementing Agency)

<sup>\*\*</sup> Sandy Loam 40% watershed area.

wise it has been divided under the four team leaders. All the four Bhoomi Samrakshak Adhikaris (BSA), Mr. Indraj, BSA-I (Engg.) (joined in 1997), Mr. Rama Nand, BSA-II (joined in 1997), Mr. K.C.Mishra, BSA-III (taken charge in December 2001 from Dr. S.K. Dubey, BSA), and Mr. Rajiv Kumar, BSA-IV (joined in 1999) are the team leaders. Mr. Fahim Ahmad (TA, B.Sc., Agr.), Dr. B.S. Yadav (CVA, BV. Sc.), Mr. Gambhir Singh (Horticulture Inspector, B.Sc., Agr.) and Mr. B.S. Baghel (MA) are the team members working under the leadership of BSA-I. Mr. Banveer Singh (JE), Mr. V.K. Verma (LDO) and Mr. Chandra Bali Yadav (Tech. Asstt. B.Sc. Agr.) are the team members working under the leadership of BSA II. Mr. M.L. Kashyap (TA, M.Sc. Agronomy) and Mr. V.K. Gangwar (JE) are the team members working under the leadership of BSA-III. Mr. Surendra Singh (Tech.Asstt.), Mr. Vijendra Kumar Saini (Diploma in Civil Engineering) and Mr. Balbir Singh (BA) are the team members working under the leadership of BSA-IV. PIA-wise details of members of Watershed Development Team has been shown in Table-2.

Table 2: PIA-wise Details of Members of WDT, District Auraiya

Name of PIA	Name and Post of the Members	Post in WDT	Qualification
BSA (Engg.),	1. Shri Indraj, BSA (Engg.), Etawah	Team Leader	M.Tech Agri Engg.
Etawah	2. Shri Fahim Ahmad (Tech. Asstt).	Member	B.Sc. (Agr.)
	3. Dr. B.S. Yadav (CVO), Etawah	Member	B.V. SC.
		Member	B.Sc. (Agr.)
	5. Shri G.S. Bahel	Member	MA.
BSA, Sahson,	6. Shri Rama Nand, BSA, Sahson	Team Leader	M.Sc. (Agr.)
Etawah	7. Shri Banveer Singh, JE	Member	Dip. in Civil Engg.
	8. Shri Vimal Kishore Verma (LDO)	Member	Dip. in Animal Husb
	9. Shri Chandra Bali Yadav (Tech Asstt)	Member	B.Sc. (Agr.)
BSA, National	10.Shri KC Mishra, BSA, (NW).	Team Leader	B.Sc. (Agr.)
Watershed	11. Shri ML Kashyap, Tech. Asstt.	Member	M.Sc.(Agronomy)
	12.Shri VK Gangwar, JE	Member	Dip. in Civil Engg.
BSA Auraiya	13. Shri Rajiv Kumar, BSA, Auraiya	Team Leader	M.Sc.(Horticulture)
at Etawah	14. Shri Surendra Singh, Tech Asstt.	Member	Dip. in Agr.Engg.
	15. Shri Vijendra Kumar Saini	Member	Dip. in Agr.Engg.
	16. Shri Ballbir Singh	Member	BA.
	BSA (Engg.), Etawah  BSA, Sahson, Etawah  BSA, National Watershed  BSA Auraiya	BSA (Engg.), Etawah  2. Shri Indraj, BSA (Engg.), Etawah 2. Shri Fahim Ahmad (Tech Asstt). 3. Dr. BS. Yadav (CVO), Etawah 4. Shri Gambhir Singh, HortInspector 5. Shri GS. Bahel  BSA, Sahson, Etawah 7. Shri Banveer Singh, JE 8. Shri Vimal Kishore Verma (IDO) 9. Shri Chandra Bali Yadav (Tech Asstt)  BSA, National 10. Shri KC Mishra, BSA, (NW). 11. Shri ML Kashyap, Tech Asstt. 12. Shri VK Gangwar, JE  BSA Auraiya at Etawah 14. Shri Surendra Singh, Tech Asstt. 15. Shri Vijendra Kumar Saini	BSA (Engg.), Etawah  1. Shri Indraj, BSA (Engg.), Etawah 2. Shri Fahim Ahmad (Tech Asstt). 3. Dr. BS. Yadav (CVO), Etawah 4. Shri Gambhir Singh, HortInspector 5. Shri GS. Bahel  BSA, Sahson, Etawah 7. Shri Banveer Singh, JE 8. Shri Vimal Kishore Verma (IDO) 9. Shri Chandra Bali Yadav (Tech Asstt)  BSA, National Watershed 10. Shri KC Mishra, BSA, (NW).  BSA Auraiya 11. Shri ML Kashyap, Tech Asstt. 12. Shri VK Gangwar, JE  BSA Auraiya 13. Shri Rajiv Kumar, BSA, Auraiya at Etawah 14. Shri Surendra Singh, Tech Asstt. 15. Shri Vijendra Kumar Saini 16. Shri Balbir Singh Member Member Member Member Member

Source: Information provided by Dy. Director's Office, 'Soil Conservation Department', Etawah.

Watershed Development Team accounts have been opened in Auraiya District under the control of team leader – Bhoomi Saurakshan Adhikaris (BSAs). It has been informed, at the time of survey in December 2001, to the evaluator that BSA, National Watershed, Etawah and BSA, Sahson, Etawah are having WDT accounts in Urban Cooperative Bank, Station Road Branch, Etawah – A/c No.403 & 1581 with a balance amount of Rs.3,23,870.95 and Rs.5,06,056.80 respectively. BSA (Engg.) is having account in Punjab National Bank, Kutchery Road Branch, Etawah – A/c No.8907 with a balance amount of Rs.3,21,347.25.

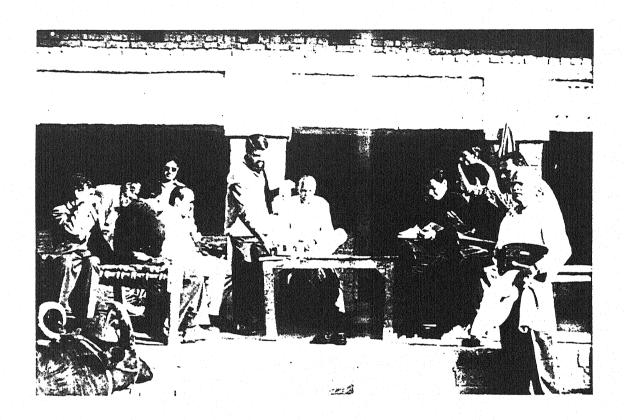
#### **District Watershed Advisory Committee**

District Watershed Advisory Committee has been set up under the Integrated Wasteland Development Project in district Auraiya. There are twelve members of this committee. All the members of this advisory committee are well qualified in watershed development work. Chief Development Officer/Executive Director and Project Director, DRDA, Auraiya are the President and Member-Secretary of the Committee. Other ten persons of this committee designated as Member. They are: (1) Dy. Director, Agriculture (Soil Conservation), Etawah, (2) Dy. Director, Agriculture Extension, Etawah, (3) Divisional Director, Social Forestry, Etawah/Auraiya, (4) District Horticulture Officer, Etawah/Auraiya, (5) BSA (Engg.), Etawah, (6) BSA (NW), Etawah, (7) BSA, Auraiya at Etawah, (8) BSA, Sahson, Etawah, (9) Dr. L.S. Bhushan, Head of the Soil and Water Conservation Research Centre, Jalesar, Agra, and (10) Principal Gramya Vikas Sansthan, Bakewar, Etawah.

#### **Watershed Committee**

Eighteen Watershed Committees (WC/WA) have been constituted in district Auraiya. All these watershed Committees have been set up in minor watershed code 1 to 18. In watershed code 19 and 20 no WC/WA have been formed so far. Six watershed committees in Ajitmal block and twelve watershed committees have been set up in Auraiya block of district Auraiya. The six villages of Ajitmal block, where committees have been formed are: (1) Griya Simar, (2) Barera, (3) Pachadeora, (4) Gohani Kalan, (5) Malgaon and (6) Ram Nagar. The name of the twelve villages of Auraiya block, where WC/WA have been formed are: (1) Dhaneupur, (2) Asewa, (3) Babani, (4) Bijhalpur, (5) Rehtoli, (6) Sararapur, (7) Nawada Jwala Prasad, (8) Rampur, (9) Jaitpur, (10) Khanpur, (11) Maraiyan, and (12) Jarhauliya. It has been informed by the BSA (Engg.), Etawah, that all the villagers of the concerning villages are the member of Watershed Association (WA) and out of them, one person has been elected as President of the Watershed Association (WA). Every watershed Committee has a President and a Secretary, works with the concern of BSA and takes active part in execution of the project work.

Watershed Committee and Watershed Associations are well trained in watershed development work. The total number of trainings had been organized upto November 2001 were 62 and total number of beneficiaries were 2524. All these beneficiaries were trained by the experts of watershed development work. The subjects of trainings were – technical points, technical level, technical knowledge, enduring of project, Self-Help Group, Community Organization and people's participation (Photoplate 1 shows the president of WC, author of the report and Dy. Director, Soil Conservation, discussing about the role of WC in the project).



Photoplate-1 President of W.C. (in centre) showing W.C. accounts Passbook and discribing the functions of W.C. to Evaluater in village Sararapur, Block & District Auraiya.

### WC/WA Accounts

Watershed Committees' accounts have been opened in the District Auraiya. BSA (Engg.), Etawah, has informed us that under the Watershed Code 1, 3, 4, 5 and 6, i.e., Griya Simar, Pachadeora, Gohani Kalan, Malgaon and Ram Nagar, five accounts of Watershed Committee (WC) were opened in Punjab National Bank, Kutchery Road Branch, Etawah, with the account Nos.9207, 9109, 9014, 9218 and 9018. Bhoomi Sanrakshan Adhikari (BSA), National Watershed, Etawah has informed that under the Watershed Codes 11, 12, 13 and 14, i.e. Nawada Jwala Prashad, Sadarapur, Maharatpur and Rampur, four accounts of WC were opened. Out of these four accounts, two accounts were opened in Etawah Urban Co-operative Bank, Ashok Nagar Branch, Etawah and Accounts Numbers are 252 and 1847. In the same way BSA Sahson, Etawah and BSA Auraiya at Etawah have opened WC Accounts in Co-operative Banks (eight accounts under each BSA). All these are Savings Bank Accounts and had been opened in Nationalized Banks.

Keeping in view to generate employment at local level, maximum physical work, i.e. formation of check Dams, Peripheral Bunds, Marginal Bunds and Contour Bunds were executed by the local people and landless labourer. This fact has been confirmed, at the time of field survey, by the local people, farmers, Gram Pradhans of the concerning villages and the members of Watershed Associations. As far as Watershed Committees' accounting is concerned, the documents they have provided to the evaluation team, shows only the account numbers and the name of the Banks where accounts were opened. These documents are not showing the withdrawal and remaining balance of the accounts. The WC/WA are keeping accounts of the persons those who are being engaged in execution of work.

## Watershed Development Fund Account

Under the Wasteland Development Project, Watershed Development Fund (WDF) accounts have been opened in 17 Watershed codes, out of the total 20 Watersheds in district Auraiya. It has been informed that due to non-allotment of the funds for Codes 2, 19 and 20, watershed association and committee could not be formed and WDF accounts also could not be opened so far in these three watershed codes. Out of these 3 watershed codes, where watershed development funds (WDF) accounts could not be opened, 2 codes come under the control of BSA (Engg.), Etawah and 1 code comes under the control of BSA, Auraiya at Etawah. The documents, which has been provided us, by the Project Implementing Agency (PIA) shows that in these 17 watershed codes, where work has been executed and is still in progress, a total amount of Rs.1,52,80,599.00 of WDF has been spent under the work accounts and Rs.8,41,573.00 is the remaining amount upto November 2001. All W.D.F. accounts had been opened in Nationalized and Rural & Urban Development Banks.

#### **Users Groups and Self-Help Groups**

Under the supervision of Project Implementing Agency (PIA), 220 users' groups have been constituted. There was a target to open a total number of 40 self-help groups (SHG) in the district, 2 self-help groups in each watershed code. But only 24 SHGs have been opened so far. Out of these 24 groups only 15 were opened their accounts in the Bank and yet 9 SHGs have to open their accounts in the Bank. Gender-wise 12 groups are of male and 3 groups are of female. These 15 SHGs cover 187 beneficiaries altogether. 43 beneficiaries belong to Scheduled Caste, 88 belong to Backward Castes and 56 belong to



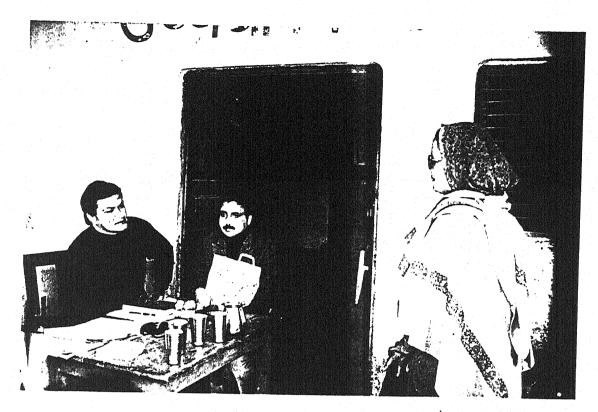
General Castes. The total contribution of all the groups are Rs.25,650.00, which has been deposited in the nationalized bank. Every member of the SHGs were having his own pass-book of his own monthly contribution, which have been supplied by the Department of Bhoomi Surakshan, Etawah.

It has been observed that the growth of SHGs are very slow in district Auraiya. As a matter of fact all these 15 groups have been formed recently in the year 2001. Some of them started in the month of October or in November 2001. Although, Dr. Pankaj Tripathi, Dy. Director, Etawah, is very instrumental and a regular field visitor along with his team and it seems that all these SHGs were formed due to his efforts and initiation as he joined the project in June 2001. The record of one male SHG and one female SHG have been checked in village Gohani Kalan, block Ajitmal, District Auraiya and found that all members pass-books were well maintained and account were opened in the bank. Photoplate-2 depicts that records of male SHG has been shown to evaluator at the village Gohani Kalan, Block Ajitmal, District Auraiya by the Dy. Director, Pankaj Tripathi and BSA, Auraiya and has been found that this SHG has 20 members altogether.

The another SHG female group has also been constituted and checked by the evaluator in the village Gohani Kalan, Block Ajitmal, District Auraiya. The evaluator met with the President of female SHG, Smt. Sarvesh Tiwari, Ex-Pradhan at the village. She showed the register of group proceedings, pass-book of Bank account and other 17 members individual pass-books arranged and printed by the Integrated Wasteland Development Project (Photophate-3). She also narrated that the impact of executed work under the project is very positive and the production of agricultural grain increases upto certain level. The other self-help group has been checked in village Kharka, project area Gohana, Block and District Auraiya (Photoplate-4). Two another self-help groups have also



Photoplate-2 Dy. Director (Soil Conservation) B.S.A. (Auraiya)
ShoWing Passbooks and proceeding register of maic
S.H.G. at village Gohani Kalan Block Ajitmal
District Auraiya.



Photoplate-3 Smt. Sarvesh Tiwari (President of S.H.G.) Showing the records of females S.H.G. to Evaluator, Gohani Kalan, Block Ajitmal District Auraiya.



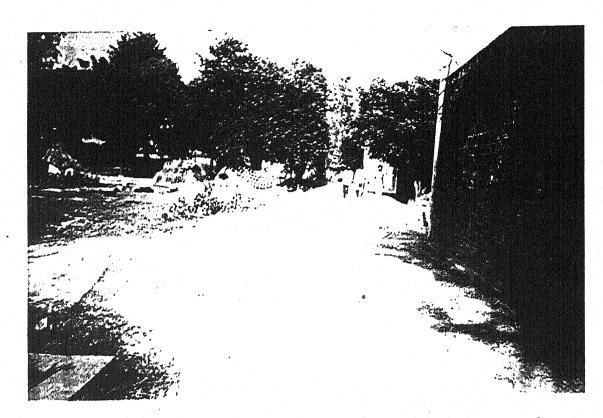
Photoplate-4 Female members of S.H.G. in Village Kharka Project Gohana, Block and District Auraiya.

been consulted in the village Durikapuram, block and district Auraiya. One was Ambedkar self-help group, having 13 male members and second was Mahila Vikas Self-Help Group, having 13 female members. These two SHGs were also started in September 2001.

In the discussion with the President of the self-help groups, it has been found that the members of the association were willing to take loan from the SHG accounts. It has also been informed by the Presidents of SHGs and PIA, that no loan has been given to any one from the revolving fund in the District Auraiya so far. All the members of users groups and self-help groups are trained in maintenance of soil and water conservation work. They were also taking part in the execution of project at field level by doing physical labour, by arranging labourer in measurement work, etc.

## The Details of Community Organization Work

The number of proposed works under the community organization were 33 and the amount sanctioned for the work was Rs.9,62,000.00. The work progress, under the community organization was found very slow. As the document, provided by the PIA to us, show that out of 33 work under this organization, only 9 have been completed and an amount of Rs.95,000.00 have been spent on the work so far. A kutcha approach road of 156 metres long has been constructed under the community development work in the village Kharka, block Auraiya, project Gohana, District Auraiya (see Photoplate-5). One kharanja road of 175 metres has been constructed under the community development work in the village Jarhauliya, block and district Auraiya (Photoplate-6). One platform has been made in village Jarhauliya and yet to be cemented (Photoplate-7).



Photoplate-5 A kachcha Road of 156 meters constructed under the Community Development Work in Village Kharka Project Gohana, Block and District Auraiya.



Photoplate-6 Kharanja Road of 175 meters has been constructed under the C.D.W. in the Village Jarhauliya Block & District Auraiya.



Photoplate-7 Platform (Chabootara) has been made under the C.D.W. in Village, Jarhauliya, District Auriya.



Photoplate-8 Site for the pond which has to be constructed under the Community Dev. Work in village, Jarhauliya Block & District Auraiya.

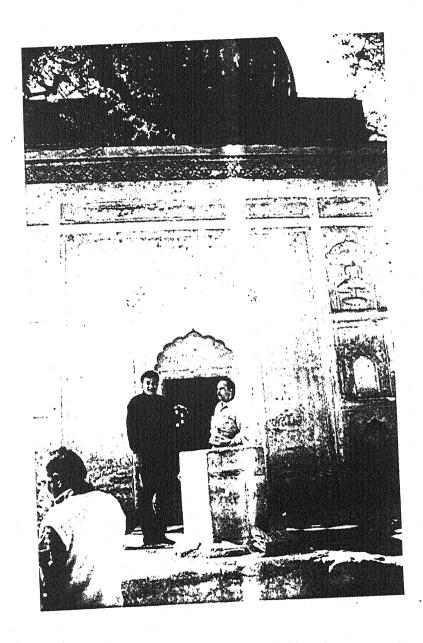
A lot of work has to be performed under the community organization works. It has found that the pace of community development work was not satisfactory. The site for the pond, which has to be constructed in Jarhauliya village (Photoplate-8), is lying untouched. The tample of Village Gohani Kalan, block Ajitmal and the platform of the tample have to be renewed under the Community Development work (Photoplate-9). So most of the work has to be furnished under the community organization work in this project. It has been informed by PIA that all the pending work of community development like construction of ponds, approach roads, community platforms, etc. would be furnished in the second phase of the project.

### Women's Role in the Project

It has been found that the role of women in execution of the project was not significant in District Auraiya. Only 3 female Self-Help Groups (SHGs) have been constituted so far (December 2001). No female worker or labour is found in the execution of fieldwork. Although, a few new female Self-Help Groups are going to be constituted, as efforts are going on, but more efforts and emphasis are required by the Project Implementation Agency (PIA), Watershed Development Team (WDT) and District Rural Development Authority (DRDA).

#### Training, Extension and Publicity

The total number of training have been given up to November 2001 in District Auraiya were 62 and total number of beneficiaries were 2524. The document regarding the training, which have been provided by the PIA to us shows that the total amount for the training was Rs.4,07,743.00 and Rs.1,59,509.00 have been spent on the training in



Photoplate-9 The Temple of Village Gohani Kalan, Block Ajitmal and it's Platform has to be renewed under the C.D.Works.

the district. All these training were performed and arranged by all the four BSAs of the district. Under the supervision of BSA (National Watershed, Etawah), the number of training were performed18, beneficiaries were 295 and money spent on these training were Rs.67,592.00, although sanctioned amount was Rs.1,17,347.00. Again, under the supervision BSA (Engg.), Etawah, the number of training were performed 20, beneficiaries were 973 and Rs.1,11,170.00 and Rs.60,081.00 were available and spent respectively. Like-wise, in the supervision of BSA, Sahson, Etawah, 9 training were conducted, 52 beneficiaries were there, the spent amount was Rs.1,005.00 and for training available amount was Rs.1,16,641.00. In the same way, under the supervision of BSA, Auraiya at Etawah, 15 training were conducted and the number of beneficiaries were 1204. The available amount was Rs.62,585.00 but spent on these training the amount was Rs.30,831.00.

It is clear from above records that the funds for the training were sufficient and PIA could not use this fund for the purpose. Out of total 92 sanctioned projects, only 52 projects were taken for the training programme. As far as publicity and extension work is concerned, it has found that a very little attention has been paid by the PIA on this work. Banners, holdings, paintings of slogans and boards of the scheme should be placed in the concerned villages at the right places.

# Sustainable Development of the Area and Performance of PIA

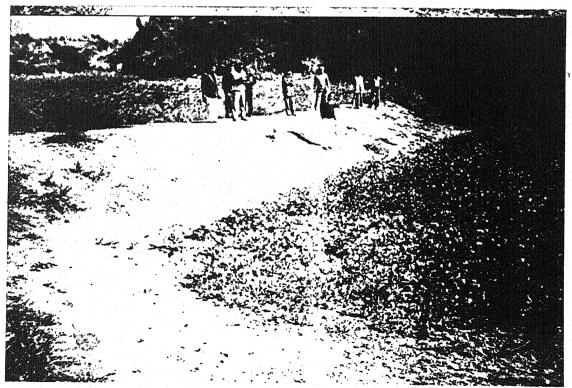
To check and find out, the sustainable development of the area and overall performance of the Project Implementation Agencies (PIA), which were shown by them on

document, an intensive field survey has been performed by us. All the records and maps relating to the Integrated Wasteland Development Project, were checked carefully on the spot (Photoplate-10). It has been found that the ravines and slopes are very steep and deep in the villages of Ajitmal block, as compared to the villages of Auraiya block of the district. Due to this reason 40 per cent area of this project is very severely affected by soil and water erosion. The check dams, peripheral bunds and contour bunds have been made to resolve this problem. A check dam (CD) has been inspected by the evaluator, which has been made in the village Gohani Kalan of Ajitmal block (Photoplate-11). It has been found in the enquiry from the farmers of the adjoining farm to the check dam, that before this CD, the land was totally barren. Now they have started farming on this land, with hope that it will improve and soil and water erosion will stop in future (Photoplate-12). An emergency outlet has been constructed at a every deep slope of the district (Photoplate-13).

Peripheral bunds and contour bunds have also been constructed and found in good condition at the time of field survey (photoplates-14&15). The contour bunds (CB) and peripheral bunds (PB) have also been checked at the time of field survey in the villages – Sararapur, Jarhauliya and Kharka of district Auraiya (Photoplates-16&17). Most of the farmers in these villages informed us that because of the formation of the check dams, peripheral bunds, marginal bunds and contour bunds, the soil and water erosion has been checked up to a certain level and agricultural production has been increased upto 15 per cent. As a matter of fact, a separate study is required to assess the level of improvement in agricultural production, soil condition and position of water table.



Photoplate-10. B.S.A. (Engg., Etawah) & B.S.A. (N.W., Etawah) are showing check dams on the map of Gohani Kalan, village to Evaluater.



Photoplate-11. Check Dam (C.D.) of village Gohani Kalan, Block Ajitmal, District Auraiya.



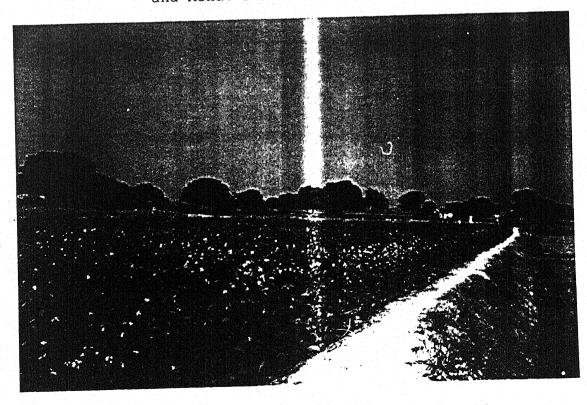
Photoplate-12. Evaluater with Mohd.Farrukh (Draftsman) & local farmers (owner of the farm) Village Gohani Kalan, Block Ajitmal Distt. Auraiya.



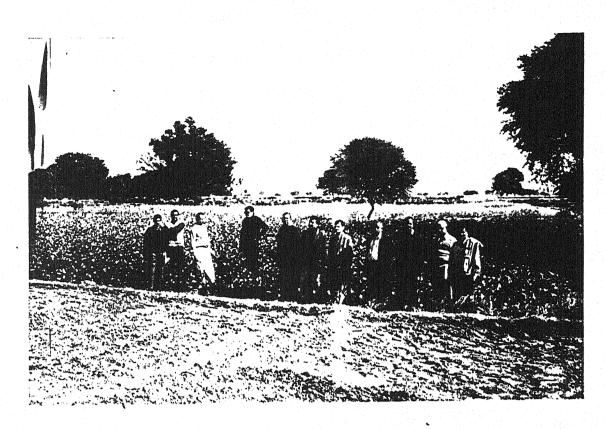
Photoplate-13. An emergency outlet has been constructed at adeep slope of village, Gohani Kalan, Block Ajitmal, Distt. Auraiya.



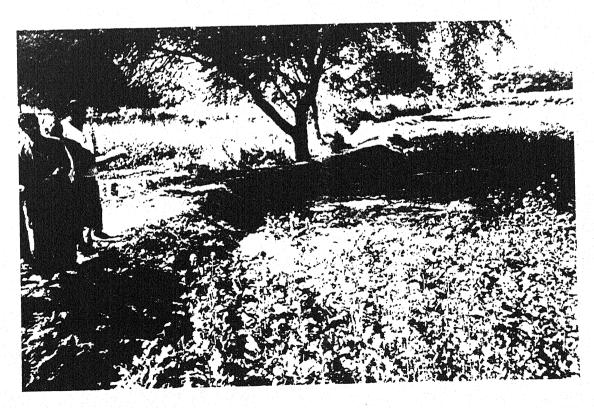
Photoplate-14. Peripheral Bund (P.B.) has been constructed and checked by evaluater in village Sararapur, Block & Distt. Auraiya. Showed by Mr.Pankaj Tripathi (Dy.Director), Mr. Indraraj (B.S.A.), Mr. Rajeev Kumar(B.S.A.), Mr. K.C. Mishra(B.S.A.) Mr. Ramanand(B.S.A.), Mr. I.K. Trivedi(Tecn.Officer) and Mohd. Farrukh (Draftsman).



Photoplate-15. Peripheral Bund (P.B.) of village Sararapur, Block & Distt. Auraiya.



Photoplate-16. Contour Bund (C.B.) of village, Jarhauliya, Block & Distt. Auraiya.



Photoplate-17. A peripheral Bund (P.B.) of village, Kharka Block & Distt. Auraiya.

Maximum number of farmers at the villages of District Auraiya to whom we met, responded in the favour of the PIA and feeling improvement in their agricultural produce, because of work completed under the Wasteland Development Project. But they were strong feeling that no work has been started so far in the direction of land levelling and smoothening. They feel that land levelling and smoothening is a costly affair for them and should be accomplished under this project.

# Physical and Financial Achievements

Under the Integrated Wasteland Development Project, the entire physical targeted area as per approved work programme by DRDA was 10149.96 ha. (around 10150 ha.). The physical area, which has been covered so far (upto November 2001) was 4817.21 ha., and the physical area, which has been left for the second phase of the project is 5332.75 ha. The total amount of Rs.3,19,98,249.00 was approved by the DRDA for the total physical work components. Out of the total amount, Rs.1,52,18,599.00 has been spent on the treatment of the physical area 4817.21 ha. so far. As records show that the amount of Rs.1,67,79,650.00 would be required for the accomplishment of the physical work in the remaining areas of 5332.75 ha. in the second phase.

The construction of the Contour Bunds (CB), which has been performed, cover an area of 1137.93 ha. and the amount spent on this work was Rs.21,33,245.00. An area of 2,21,781 ha. has been covered for the formation of Peripheral Bunds (PB)/Marginal Bunds (MB) and an amount of Rs.69,59,169.00 has been spent on the performation of the job. The Check Dams (CD) have been made in the area 1454.94 ha. and the amount spent on the executed work was Rs.59,80,185.00. Other physical work executed in field 6.53 ha. and amount spent on this work was Rs.1,46,000.00.

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It has been found that out of a total 20 watershed codes, 3 watershed codes are still lying untouched. The PIA informed that work could not be started in these three watershed codes, i.e. code No.3, 19 and 20, due to non-availability of funds for these watersheds. The amount sanctioned for the work component was Rs.158.74 lakhs, for training was Rs.4.42 lakhs, for administrative functions was Rs.9.28 lakhs and for community organisation development work was Rs.9.62 lakhs. So total sanctioned amount was Rs.182.06 lakhs. Out of this, Rs.152.80 lakhs has been spent on work component, Rs.1.60 lakhs on training, Rs.5.61 lakhs on administrative expenses and Rs.0.95 lakh on community development work. Thus, a total amount of Rs.160.96 lakhs has been exhausted from a sanctioned amount of 182.06 lakhs.

# **Utilization of Fund and Maintenance of Records**

A total fund of Rs.182.06 lakhs has been sanctioned so far under the Integrated Wasteland Development Project for the execution of work component, training programme, administrative expenses and for community development work. Table-3 shows workwise distribution of the funds and the expenditure made upto November 2001.

Table-3: Integrated Wasteland Development Project, District Auraiya
Total Amount Received and Total Expenditure Made

(Upto November 2001)

			1-1-1-1-1-1-1-1
Sl.No.	Items	Amount Received (Rs. in lakhs)	Expenditure (Rs. in lakhs)
1.	Work component	158.74	152.80
2.	Training Programme	4.42	. 1.60
3.	Administrative Expenses	9.28	6.61
4.	Community Development work	9.62	0.95
	Total	182.06	160.96

Source: Information provided by PIA, Auraiya at Etawah.

All the funds, which were sanctioned for the execution of work, were properly utilized and the financial records of the accounts were found well maintained. The details of expenditure of items like work component, training programmes and community development work has also been provided to us, which has been described above in the report. Only the details of administrative expenses were not provided to us.

# **Overall Impact Assessment**

Contour bunds, peripheral bunds/Marginal bunds and check dams have been constructed according to the approved plan in the district Auraiya. The construction of ponds are required in the villages of the district and should be constructed under the work plan and community development work. Contour bunds, Peripheral Bunds/Marginal Bunds and Check Dams are required sodding on them. More emphasis is required on land levelling and smoothening of land, as it is also a part of the project proposal. Pucca structure for safe disposal of excess run off water from all sort of bunds are required and must be executed. At the time of field survey, no stone check dam or pucca check dam was found in the district. Contour ploughing is also essential to minimise soil erosion.

It has been found at the time of field survey that the condition of the agricultural land has been improved due to the construction of all types of Bunds, Dams, etc. Soil erosion and water erosion has been checked upto a certain level and farmers have started ploughing on their farms those were lying barren few years ago. It has also came to know that water level of the area has been improved. At this juncture, it is pertinent to say that a deep Impact Assessment Study of the project area is immediately required to know that how much agricultural production has been increased, how much soil and water erosion has been checked and how much water table increased in the district Auraiya.

On the whole a total amount of Rs.4.42 lakhs were sanctioned for the training programmes and only Rs.1.6 lakhs were used for the purpose. It clearly indicates that no proper emphasis has been paid for the training programmes in the District. Particularly, a very little efforts had been given under the supervision of BSA (Sahson, Etawah), where only 9 trainings were conducted for technical subjects. Although, an amount of Rs.1,16,641.00 was allotted for the training programmes of the area Sahson but a very little amount of Rs.1005/- was spent on trainings. The total number of beneficiaries of training programmes of the watershed Sahson were only 52 persons. This is really a very poor effort.

It has also been found that the sanction amount for Community Development Work was Rs.9.62 lakh and out of this, only Rs.0.95 lakh were used upto November 2001. Community Development Work is one of the most important components of the project and no work has been performed at all under the supervision of BSA (Sahson, Etawah) and BSA (Engg., Etawah) so far. So any expenditure has not made in their watersheds on community development programmes. It has also been found that no pain had been taken for the formation of Self-Help Groups (SHG) particularly in Sahson Watershed, Etawah, where only one group of SHG has been constituted so far, out of a target of 8 Self-Help Groups. More emphasis is required for the formation of targeted Self-Help Groups immediately in the district Auraiya.

